



U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
OFFICE OF RESEARCH AND DEVELOPMENT (ORD)

**NATIONAL CENTER FOR
ENVIRONMENTAL
RESEARCH (NCER)**

**SCIENCE TO ACHIEVE RESULTS
(STAR) PROGRAM**

STANDARD INSTRUCTIONS FOR SUBMITTING A STAR APPLICATION

For all 2002/2003 STAR Grant Applications

STANDARD INSTRUCTIONS FOR SUBMITTING A STAR APPLICATION

Science To Achieve Results (STAR) Program

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

OFFICE OF RESEARCH AND DEVELOPMENT (ORD)

NATIONAL CENTER FOR ENVIRONMENTAL RESEARCH (NCER)

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Standard Form 424

Instructions for SF 424

Key Contacts Form

Key Contacts Continuation Form

Abstract Format

Suggested Keywords

Current and Pending Support Form, and Budget Format

This section contains the standard instructions on how to apply for a STAR grant. Proposed projects must be specifically designed to advance the state of knowledge in the research areas described in the specific solicitation for which the application is submitted. Please see the NCER web site, <http://www.epa.gov/ncerqa>, for detailed information on research program areas by selecting “Announcements.” Information on past grant awards may also be found on this site by selecting “Grants,” then “Recipients Lists.”

1. Sorting Codes

In order to facilitate proper assignment and review of applications, each research topic area described in a Request for Applications (RFA) is assigned a sorting code. It is the responsibility of the applicant to identify the proper sorting code. Failure to do so could result in an inappropriate peer review assignment. If your research seems to fit under more than one sorting code, choose the most appropriate one. At various places within the application, applicants are asked to identify the sorting code corresponding to the research topic area in the solicitation.

The sorting codes and application deadlines for each solicitation will be found at the end of the technical description of the specific RFA. The sorting code must be placed at the top of the abstract (location is shown in the abstract format, see attachment), in Box 10 of Standard Form 424 (see description below in the section on SF424), and in the address on the package that is sent to EPA (see Section 4 How to Apply below).

2. The Application

The initial application is made through submission of the materials described below. ***It is essential that the application contain all information requested and be submitted in the formats described.*** If an application is considered for award (i.e., after external peer review and internal review), additional forms and other information will be requested by the EPA Project Officer, whose name will also be found in the specific solicitation on the NCER web site. The application must contain the following:

A. Standard Form 424: The applicant must complete SF424 (see attached form and instructions). This form will be the ***first page*** of the application. Instructions for completion of the SF424 are included with the form. The form must contain the original signature of an authorized representative of the applying institution. Please note that both the Principal Investigator and an administrative contact are to be identified in Section 5 of the SF424.

B. Key Contacts: The applicant must complete the Key Contacts Form (see attached) as the second page

of the application. Additional copies of the form should be used to provide information on major co-investigators.

C. Table of Contents: Provide a list of the major subdivisions of the application indicating the page number on which each section begins.

D. Abstract: *The abstract is a very important document.* All abstracts are provided to the peer review panelists. Prior to attending the peer review panel meetings, some of the panelists may read only the abstract. Therefore, it is critical that the abstract accurately describe the research being proposed and convey all the essential elements of the research. Also, the abstracts of applications that receive funding will be posted on the NCER web site. The abstract, ***limited to one page***, should include the information indicated in the example format provided (see attached) and described below (1-8). Examples of abstracts for current grants may be found on the NCER web site.

1. Research Category and Sorting Code: Enter the full name of the solicitation for which your application is submitted and the code that corresponds to the appropriate RFA topic. (Be sure to substitute the appropriate letter and number for the "XX" in 2002-STAR-XX).
2. Title: Use the exact title of your project as it appears in the rest of the application. The title of the application must be brief, yet represent the major thrust of the project. Because the title will be used by those not familiar with the project, strike a balance between highly technical words or phraseology and more commonly understood terminology. Do not use phrases such as "research on."
3. Investigators: Start with the Principal Investigator. Also list the names and affiliations of each major co-investigator who will significantly contribute to the project. Provide a web site URL or an E-Mail contact address for additional information.
4. Institution: In the same order as the list of investigators, list the name and city/state of each participating university or other applicant institution.
5. Project Period: Provide the proposed project beginning and ending dates.
6. Project Cost: Provide the total dollar request to EPA for all grant years for the entire project period.
7. Project Summary: Provide three subsections addressing: (a) the objectives of the study (including any hypotheses that will be tested), (b) the experimental approach to be used (an accurate description of the project as described in the proposal), and (c) the expected results of the project and how it addresses the research needs identified in the solicitation, including the estimated improvement in risk assessment or risk management that will result from successful completion of the proposed work.

8. **Supplemental Keywords:** A list of suggested keywords is provided for your use (NCER form 3). Do not duplicate terms already used in the text of the abstract. Providing a complete set of keywords is very important to assist database searchers in finding reference to your research.

E. Research Plan: This description must not exceed fifteen (15) consecutively numbered (center bottom), 8.5x11-inch pages of single-spaced, standard 12-point type with 1-inch margins. The description must provide the following information:

1. **Objectives:** List the objectives of the proposed research and the hypotheses being tested during the project, and briefly state why the intended research is important. This section should also include any background or introductory information that would help explain the objectives of the study. If this application is for continuation of research supported by an existing or former grant awarded by the STAR program, indicate the number of the grant and provide a brief report of progress and results achieved under that grant (one to two pages recommended).

2. **Approach:** Outline the research design, methods, and techniques that you intend to use in meeting the objectives stated above (five to 10 pages recommended).

3. **Expected Results or Benefits:** Describe the results you expect to achieve during the project, the benefits of success as they relate to the topic under which the proposal is submitted, and the potential recipients of these benefits. This section should also discuss how the research results will lead to solutions to environmental problems (one to two pages recommended).

4. **General Project Information:** Discuss other information relevant to the potential success of the project. This should include facilities, personnel, project schedules, proposed management, interactions with other institutions, etc. (one to two pages recommended).

5. **Important Attachments:** Appendices and/or other information may be included but must remain within the 15-page limit. References cited are in addition to the 15 pages.

The following sections must be included in addition to the 15-page Research Plan.

F. Resumes: Provide the resumes of all principal investigators and important co-workers. The resume for each individual must not exceed two consecutively numbered (bottom center), 8.5x11-inch pages of single-spaced, standard 12-point type with 1-inch margins.

G. Current and Pending Support: The applicant must identify any current and pending financial resources that are intended to support research related to the proposal or which would consume the time

of principal investigators. Complete the Current and Pending Support form (NCER form 5, see attachment) for each investigator and other senior personnel involved in the application.

H. Budget: The applicant must present a detailed, itemized budget for the entire project. This budget must be in the format provided in the example (see attachment) and must not exceed two consecutively numbered (bottom center), 8.5x11-inch pages with 1-inch margins. If a sub-agreement, such as a sub-contract, is included in the application, provide a separate budget for the sub-contract in the same format. Include the total amount for the sub-contract under “Contracts” in the master budget. Please note that institutional cost-sharing is not required and, therefore, does not have to be included in the budget table. However, if you intend to cost-share, a brief statement concerning cost-sharing can be added to the budget justification, and should include estimated dollar amounts in the appropriate categories in the budget table. ***Do not exceed the budgetary limits described in the RFA. Applications that do so will be returned without review.***

I. Budget Justification: Describe the basis for calculating the personnel, fringe benefits, travel, equipment, supplies, contractual support, and other costs identified in the itemized budget and explain the basis for their calculation (special attention should be given to explaining the “travel,” “equipment,” and “other” categories). Include an explanation of how indirect costs were calculated. The budget justification should not exceed two consecutively numbered (bottom center), 8.5x11-inch pages of single-spaced, standard 12-point type with 1-inch margins.

J. Quality Assurance Statement: For any project involving data collection or processing, conducting surveys, environmental measurements, and/or modeling, or the development of environmental technology (whether hardware-based or via new techniques) for pollution control and waste treatment, provide a statement on quality processes that will be used to assure that results of the research satisfy the intended project objectives. The statement must describe a quality system that complies with the requirements of ANSI/ASQC E4, Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs, and must not exceed two consecutively numbered, 8.5x11-inch pages of single-spaced, standard 12-point type with 1-inch margins. This Statement must present the required information for each item listed below, or reference the specific page and paragraph number of the Research Plan containing the information, or provide a justification as to why the item does not apply to the proposed research.

1. Discuss the activities to be performed or hypothesis to be tested and criteria for determining acceptable data quality. (Note: Such criteria may be expressed in terms of precision, accuracy, representativeness, completeness, and comparability or in terms of data quality objectives or acceptance criteria. Furthermore, these criteria must also be applied to determine the acceptability of existing, or “secondary”, data to be used in the project. In this context, secondary data may be defined as data previously collected for other purposes or from other sources, including the literature, compilations from computerized data bases, or results from models of environmental processes and conditions.)

2. Describe the study design, including sample type(s) and location requirements, all statistical analyses that were or will be used to estimate the types and numbers of physical samples required, or equivalent information for studies using survey and interview techniques.
3. Describe the procedures for the handling and custody of samples, including sample collection, identification, preservation, transportation, and storage.
4. Describe the procedures that will be used in the calibration and performance evaluation of all analytical instrumentation and all methods of analysis to be used during the project. Explain how the effectiveness of any new technology will be measured and how it will be benchmarked to improve existing processes, such as those used by industry.
5. Discuss the procedures for data reduction and reporting, including a description of all statistical methods, with reference to any statistical software to be used, to make inferences and conclusions; discuss any computer models to be designed or utilized with associated verification and validation techniques.
6. Describe the quantitative and/or qualitative procedures that will be used to evaluate the success of the project, including any plans for peer or other reviews of the study design or analytical methods prior to data collection.

ANSI/ASQC E4, Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs, is available for purchase from the American Society for Quality, phone 1-800-248-1946, item T55. Only in exceptional circumstances should it be necessary to consult this document. An EPA guidance document, Guidance on Satisfying EPA Quality System Requirements for STAR Grants (EPA QA/G-1STAR) is available for potential applicants and addresses in detail how to comply with ANSI/ASQC E4 for STAR grants. This may be found on the Internet at <http://www.epa.gov/ncerqa> as indicated in the introductory paragraph to “Announcements.”

K. Postcard: The Applicant must include a self-addressed, stamped 3x5-inch postcard with the application. This will be used to acknowledge receipt of the application and to transmit other important information to the applicant. If the applicant does not receive an acknowledgment within 60 days of the submission deadline, then immediately contact the project officer listed under “Contacts” in the specific solicitation.

3. Proprietary Information

By submitting an application in response to this solicitation, the applicant grants EPA permission to share the application with technical reviewers both within and outside the Agency. Applications containing proprietary or other types of confidential information will be returned to the applicant without review.

4. How to Apply

The original and ten (10) copies of the fully developed application (11 in all) and one (1) additional copy of the abstract, ***must be received by NCER no later than 4:00 P.M. Eastern Time*** on the closing date assigned to the topic area (see specific solicitation for date).

The application and abstract must be prepared in accordance with these instructions. Informal, incomplete, or unsigned proposals will be returned without review. The original, signature copy of the application must not be bound or stapled in any way. The other 10 required copies of the application should be secured with paper or binder clips or secure staples.

Send completed applications via regular mail to:

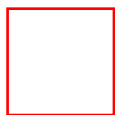
U.S. Environmental Protection Agency
Peer Review Division (8703R)
Sorting Code: 2002-STAR-XX (replace the "XX" with the appropriate code)
1200 Pennsylvania Avenue, NW
Washington DC 20460

The following address must be used for express mail-delivered applications:

U. S. Environmental Protection Agency
Peer Review Division (8703R)
Sorting Code: 2002-STAR-XX (replace the "XX" with the appropriate code)
Room B-10105
1300 Pennsylvania Avenue, NW
Washington DC 20004

Phone: (202) 564-6939 (for express mail applications)

Courier- or personally-delivered applications must be brought to the Ronald Reagan Building, 1300 Pennsylvania Avenue, NW, Washington, DC 20004. The courier must come to the EPA Visitors Lobby (see map) and tell the security guard that he/she has a delivery for the EPA mail room. The courier will be required to sign a visitor's log, and will be directed to the EPA mail room. The mail room is open from 8:00 a.m. until 4:00 p.m. weekdays, exclusive of Federal holidays. If the applicant requires a receipt for the delivery, you will need to provide a form which the mail room person will sign.



5. Guidelines, Limitations, and Additional Requirements

Applications must be submitted for one topic area only, using a single Sorting Code. Applications

submitted for more than one RFA topic will be assigned to the topic designated on the first version received or to the first sorting code designated on the application. If you wish to submit applications for more than one STAR RFA, you must ensure that the research proposed in each is significantly different from any other that has been submitted to EPA or from any other grant you are currently receiving from EPA or any other federal government agency.

Projects which contain sub-contracts constituting more than 40% of the total direct cost of the grant for each year in which the subcontract is awarded will be subject to special review. Additional justification for extensive use of such sub-contracts must be provided in which the need is discussed in relation to the accomplishment of the specific objectives of the research project.

If your application exceeds the budgetary limits described in the RFA, it will be returned to you without review.

6. Review and Selection Criteria

All grant applications are reviewed by an appropriate technical peer review panel. This review is designed to evaluate each proposal according to its scientific merit. In general, each review group is composed of non-EPA scientists, engineers, social scientists, and/or economists who are experts in their respective disciplines and are proficient in the technical subjects they are reviewing. Reviewers use the following criteria to help them in their evaluations:

1. The originality and creativity of the proposed research, the appropriateness and adequacy of the research methods proposed, and the appropriateness and adequacy of the Quality Assurance Statement. Is the research approach practical and technically defensible, and can the project be performed within the proposed time period? Will the research contribute to scientific knowledge in the topic area of the solicitation? Is the proposal well-prepared with supportive information that is self-explanatory and understandable?
2. The qualifications of the principal investigator(s) and other key personnel, including research training, demonstrated knowledge of pertinent literature, experience, and publication records. Will all key personnel make a significant time commitment to the project?
3. The availability and/or adequacy of the facilities and equipment proposed for the project. Are there any deficiencies that may interfere with the successful completion of the research?
4. The responsiveness of the proposal to the research needs identified for the topic area. Does the proposal adequately address the objectives specified for this topic area?
5. Although budget information does not reflect on the application's scientific merit, the

reviewers are asked to provide their view on the appropriateness and/or adequacy of the proposed budget and its implications for the potential success of the proposed research. Input on requested equipment is of particular interest.

Applications that receive scores of excellent and very good from the peer reviewers are subjected to a programmatic review within EPA to assure a balanced research portfolio for the Agency. Recommendations are then made to the NCER Director who makes funding decisions. Applications are selected for award on the basis of EPA goals, technical merit, relevancy to ORD research priorities, program balance, and budget.

Customarily, applicants are notified about award decisions within 6 months of the application deadline. A summary statement of the scientific review by the peer panel will be provided to each applicant with the award or declination letter.

Applications selected for funding will require additional certifications, possibly a revised budget, responses to any comments or suggestions offered by the peer reviewers, and an electronic version of the revised project abstract. EPA Project Officers will contact Principal Investigators to obtain these materials.

7. Funding Mechanism

The funding mechanism for all awards issued under a solicitation will consist of assistance agreements from EPA. All award decisions are subject to the availability of funds. In accordance with Public Law 95-224, the primary purpose of a grant is to accomplish a public purpose of support or stimulation authorized by Federal statute rather than acquisition for the direct benefit of the Agency. In issuing a grant agreement, EPA anticipates that there will be no substantial EPA involvement in the design, implementation, or conduct of the research. However, EPA will monitor research progress through annual reports provided by grantees and contacts, perhaps site visits, with the Principal Investigator.

8. Expectations and Responsibilities of STAR Grantees

Meetings. Principal Investigators will be expected to budget for, and participate in, periodic All-Investigators Meetings (also known as progress reviews) approximately once per year with EPA scientists and other grantees to report on research activities and to discuss issues of mutual interest.

Approval of Changes. Prior written approval is required from EPA if there is to be a significant change in the research that deviates markedly from work described in the application. Examples of these changes are contained in 40 C.F.R. 30.25.

Human Subjects: A grant recipient must agree to meet all EPA requirements for studies using human subjects prior to implementing any work with these subjects. These requirements are given in 40 C.F.R. 26, called the “Common Rule.” No work involving

human subjects, including recruiting, can start before EPA has received a copy of the relevant Institutional Review Board's (IRB) approval of the project. If human subjects are involved in the research, the recipient must provide, as part of annual reports, evidence of subsequent IRB reviews as required by the Common Rule.

Animal Welfare: Grant recipients agree to comply with the Animal Welfare Act of 1966 (P.L. 89-554), as amended. All projects involving vertebrate animals must have approval from the applying organization's Institutional Animal Care and Use Committee before issuance of an EPA grant.

Data Access and Information Release. All data sets, models, and databases developed under STAR grants may become accessible to the public and therefore freely available to all researchers. If the data supporting a published paper are used in a government action having the force and effect of law and such data are requested by the public, EPA must ask for it, and the grantee must submit it. Please note that 40 C.F.R. 30.36 has been changed to comply with OMB Circular A-110. The text of this regulation is given in Federal Register 65(52):14406-14417, March 16, 2000.

Reports: Each grant issued will include Terms and Conditions that specify reporting requirements. These Terms and Conditions include annual progress reports with associated summaries for posting on NCER's web site, and a final report with an executive summary for web posting. The recipient will be required to provide copies of any peer reviewed journal article(s) resulting from the research during the project period. In addition, the recipient should notify the EPA Project Officer of any papers that are published after completion of the grant which were based on research supported by the grant. NCER intends to post references to all publications resulting from the grant on the NCER web site.

Publications. Subject to 40 CFR 30.36 or 40 CFR 31.34, the recipient may publish and distribute scientific, technical, and other works developed under the grant. Any documents developed under the agreement for distribution to the public or inclusion in a scientific, technical, or other journal shall include the following statement: "This publication [article] was developed under a STAR Research Assistance Agreement No. _____ awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by EPA. The views expressed in this document are solely those of [name of recipient] and EPA does not endorse any products or commercial services mentioned in this publication."

9. Contacts

Additional general information on the STAR grants program, forms used for applications, etc., may be obtained by exploring our Web page at <http://www.epa.gov/ncerqa>. Information not available on the Internet may be obtained by contacting:

U.S. Environmental Protection Agency
National Center for Environmental Research (8703R)
1200 Pennsylvania Avenue, NW
Washington DC 20460

Specific technical questions should be directed to the EPA contact person whose name is provided at the end of each specific solicitation.

APPLICATION FOR FEDERAL ASSISTANCE

| | | | |
|------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------|--|
| 1. TYPE OF SUBMISSION <i>Application</i> <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction | | 2. DATE SUBMITTED Applicant Identifier | |
| <i>Preapplication</i> <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction | | 3. DATE RECEIVED BY STATE State Applicant Identifier | |
| | | 4. DATE RECEIVED BY FEDERAL AGENCY Federal Identifier | |

| | | | |
|---------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 5. APPLICANT INFORMATION | | IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, LIST ACRONYM(S) | |
| Legal Name: | | Organizational Unit: | |
| Address (give city, county, state, and zip code): | | Name and telephone and E-mail number of the person to be contacted on matters involving this application (give area code) PI: ADMIN. CONTACT: | |

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| 6. EMPLOYER IDENTIFICATION NUMBER (EIN): <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> | 7. TYPE OF APPLICANT: (enter appropriate letter in box) <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District </div> <div style="width: 45%;"> H. Independent School Dist. I. State Controlled Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify) _____ </div> </div> |
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| 8. TYPE OF APPLICATION: <div style="display: flex; justify-content: space-around;"> <input type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision </div> If Revision, enter appropriate letter(s) in box(es): A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration Other (specify): _____ | 9. NAME OF FEDERAL AGENCY: <div style="text-align: center; font-weight: bold;">U.S. Environmental Protection Agency - ORD - NCER</div> |
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| 10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: TITLE: 2002-STAR – | <div style="border: 1px solid black; display: inline-block; padding: 2px 5px;">6</div> <div style="border: 1px solid black; display: inline-block; padding: 2px 5px;">6</div> <div style="border: 1px solid black; display: inline-block; padding: 2px 5px;">.</div> <div style="border: 1px solid black; display: inline-block; padding: 2px 5px;">5</div> <div style="border: 1px solid black; display: inline-block; padding: 2px 5px;">0</div> <div style="border: 1px solid black; display: inline-block; padding: 2px 5px;">0</div> |
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| 11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: | |
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| 12. AREAS AFFECTED BY PROJECT (cities, counties, states, etc.): <div style="height: 40px;"></div> | |
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| 13. PROPOSED PROJECT: <div style="display: flex;"> <div style="width: 45%; border-bottom: 1px solid black; margin-bottom: 5px;">Start Date</div> <div style="width: 55%; border-bottom: 1px solid black; margin-bottom: 5px;">Ending Date</div> </div> | 14. CONGRESSIONAL DISTRICTS OF: <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">a. Applicant</div> <div style="width: 55%;">b. Project</div> </div> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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| 15. ESTIMATED TOTAL PROJECT FUNDING: | 16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS? | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">a. Federal</td> <td style="width: 15%;">\$</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: right;">.00</td> </tr> <tr> <td>b. Applicant</td> <td>\$</td> <td></td> <td style="text-align: right;">.00</td> </tr> <tr> <td>c. State</td> <td>\$</td> <td></td> <td style="text-align: right;">.00</td> </tr> <tr> <td>d. Local</td> <td>\$</td> <td></td> <td style="text-align: right;">.00</td> </tr> <tr> <td>e. Other</td> <td>\$</td> <td></td> <td style="text-align: right;">.00</td> </tr> <tr> <td>f. Program Income</td> <td>\$</td> <td></td> <td style="text-align: right;">.00</td> </tr> <tr> <td>g. TOTAL</td> <td>\$</td> <td></td> <td style="text-align: right;">.00</td> </tr> </table> | a. Federal | \$ | | .00 | b. Applicant | \$ | | .00 | c. State | \$ | | .00 | d. Local | \$ | | .00 | e. Other | \$ | | .00 | f. Program Income | \$ | | .00 | g. TOTAL | \$ | | .00 | a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____ b. NO. <input checked="" type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW |
| a. Federal | \$ | | .00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| b. Applicant | \$ | | .00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| c. State | \$ | | .00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| d. Local | \$ | | .00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| e. Other | \$ | | .00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| f. Program Income | \$ | | .00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| g. TOTAL | \$ | | .00 | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Yes If "Yes," attach an explanation. <input type="checkbox"/> No </div> | |
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| 18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT. THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED. | | |
| a. Typed Name of Authorized Representative | b. Title | c. Telephone number |
| d. Signature of Authorized Representative | | e. Date Signed |

INSTRUCTIONS FOR THE SF 424

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal Assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

- | Item: | Entry: | Item: | Entry: |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Self-explanatory. | | State, counties, cities.) |
| 2. | Date application submitted to Federal agency (or State, if applicable) & applicant's control number (if applicable). | 13. | Self-explanatory. |
| 3. | State use only (if applicable). | 14. | List the applicant's Congressional Districts and any District(s) affected by the program or project. |
| 4. | If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank. | 15. | Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, include <u>only</u> the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15. |
| 5. | Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application. | 16. | Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process. |
| 6. | Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service. | 17. | This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit allowances, loans and taxes. |
| 7. | Enter the appropriate letter in the space provided. | 18. | To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application. |
| 8. | Check appropriate box and enter appropriate letter(s) in the space(s) provided: — "New" means a new assistance award. — "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date. — "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation. | | |
| 9. | Name of Federal agency from which assistance is being requested with this application. | | |
| 10. | Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is required. | | |
| 11. | Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project. | | |
| 12. | List only the largest political entities affected (e.g., | | |

KEY CONTACTS FORM

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name: _____
Title: _____
Complete Address: _____

Phone Number: _____

Payee: *Individual authorized to accept payments.*

Name: _____
Title: _____
Mailing Address: _____

Phone Number: _____

Administrative Contact: *Individual from Sponsored Programs Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc.)*

Name: _____
Title: _____
Mailing Address: _____

Phone Number: _____
FAX Number: _____
E-Mail Address: _____

Principal Investigator: *Individual responsible for the technical completion of the proposed work.*

Name: _____
Title: _____
Mailing Address: _____

Phone Number: _____
FAX Number: _____
E-Mail & Web Address: _____

ADDITIONAL KEY CONTACTS (use as many sheets as needed)

Major Co-Investigator: *Individual responsible for the completion of major portions of the proposed work.*

Name: _____
Title: _____
Mailing Address: _____

Phone Number: _____
FAX Number: _____
E-Mail & Web Address: _____

Major Co-Investigator: *Individual responsible for the completion of major portions of the proposed work.*

Name: _____
Title: _____
Mailing Address: _____

Phone Number: _____
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Phone Number: _____
FAX Number: _____
E-Mail & Web Address: _____

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Phone Number: _____
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Title: _____
Mailing Address: _____

Phone Number: _____
FAX Number: _____
E-Mail & Web Address: _____

EPA STAR Grant Abstract (EXAMPLE FORMAT)

Abstract: The abstract is a very important document. Prior to attending the peer review panel meetings, some of the panelists may read only the abstract. Therefore, it is critical that the abstract accurately describe the research being proposed and convey all the essential elements of the research. Also, the abstracts of funded applications will be posted on the NCER web site. The abstract, **limited to one page**, should include the following information, as indicated in this example format. Examples of abstracts for current grants may be found on the NCER web site.

1. **Research Category and Sorting Code:** Enter the full name of the solicitation to which your application is submitted and use the correct code that corresponds to the appropriate RFA topic. (Be sure to substitute the appropriate letter and number for the "XX" in 2002-STAR-XX).
2. **Title:** Use the exact title as it appears in the rest of the application. The title of the application must be brief, yet represent the major thrust of the project. Because the title will be used by those not familiar with the project, avoid highly technical words or phraseology. Do not use phrases such as "research on."
3. **Investigators:** Start with the Principal Investigator. Also list the names and affiliations of each major co-investigator who will significantly contribute to the project. Provide a website url and/or email contact address for additional information
4. **Institution:** List the name and city/state of each participating university or other applicant institution, in the same order as the list of investigators.
5. **Project Period:** Provide the proposed project beginning and ending dates.
6. **Project Cost:** Provide the total request to EPA for the entire project period.
7. **Project Summary:** This should summarize: (a) the **objectives** of the study (including any hypotheses that will be tested), (b) the experimental **approach** to be used (which should give an accurate description of the project as described in the proposal), and (c) the **expected results** of the project and how it addresses the research needs identified in the solicitation, including the estimated improvement in risk assessment or risk management that will result from successful completion of the work proposed.
8. **Supplemental Keywords:** A list of suggested keywords is provided for your use. Do not duplicate terms already used in the text of the abstract. Providing a complete set of keywords is very important.

SUGGESTED KEYWORDS

Media: (media, air, ambient air, atmosphere, ozone, water, drinking water, watersheds, groundwater, land, soil, sediments, acid deposition, global climate, indoor air, mobile sources, CASTNET, stratospheric ozone, tropospheric, marine, estuary, precipitation, leachate, adsorption, absorption, chemical transport)

Risk Assessment: (exposure, risk, risk assessment, effects, health effects, ecological effects, human health, bioavailability, metabolism, vulnerability, sensitive populations, dose-response, carcinogen, teratogen, mutagen, animal, mammalian, organism, cellular, population, enzymes, infants, children, elderly, stressor, age, race, diet, metabolism, genetic pre-disposition, genetic polymorphisms, sex, ethnic groups, susceptibility, cumulative effects)

Chemicals, toxics, toxic substances: (chemicals, toxics, particulates, ODS, VOC, CFC, PAH, PNA, PCB, dioxin, metals, heavy metals, solvents, oxidants, nitrogen oxides, sulfates, organics, DNAPL, NAPL, pathogens, viruses, bacteria, acid rain, effluent, discharge, dissolved solids, intermediates)

Ecosystem Protection: (ecosystem, indicators, restoration, regionalization, scaling, terrestrial, aquatic, habitat, integrated assessment)

Risk Management: pollution prevention (green chemistry, life-cycle analysis, alternatives, sustainable development, clean technologies, innovative technology, nanotechnology, renewable, waste reduction, waste minimization, environmentally conscious manufacturing); treatment (remediation, bioremediation, cleanup, incineration, disinfection, oxidation, restoration)

Public Policy: (public policy, decision making, community-based, cost-benefit, conjoint analysis, observation, non-market valuation, contingent valuation, survey, psychological, preferences, public good, Bayesian, socio-economic, willingness-to-pay, compensation, conservation, environmental assets, sociological)

Scientific Disciplines: (environmental chemistry, marine science, biology, physics, engineering, social science, ecology, hydrology, geology, histology, epidemiology, genetics, pathology, mathematics, limnology, entomology, zoology)

Methods/Techniques: (EMAP, modeling, monitoring, analytical, surveys, measurement methods, general circulation models, climate models, satellite, landsat, remote sensing)

Geographic Areas: (Northeast, central, Northwest, Chesapeake Bay, Great Lakes, Midwest, Mid-Atlantic, states: {use both full name and two letter abbreviation}, EPA Regions 1 through 10)

Sectors: (agriculture, business, transportation, industry {petroleum, electronics, printing, etc}): {identify 4 digit SIC codes}, service industry, food processing, etc)

Current and Pending Support

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

| | |
|---------------|-----------------------------------------------------------------------------------|
| Investigator: | Other agencies (including NSF) to which this proposal has been/will be submitted. |
|---------------|-----------------------------------------------------------------------------------|

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: | Source of Support: Total Award Amount: \$ _____ Total Award Period Covered: _____ Location of Project: _____ Person-Months Per Year Committed to the Project. Cal: _____ Acad: _____ Sumr: _____ |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: | Source of Support: Total Award Amount: \$ _____ Total Award Period Covered: _____ Location of Project: _____ Person-Months Per Year Committed to the Project. Cal: _____ Acad: _____ Sumr: _____ |
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Itemized Budget for EPA STAR Grant Applications

(Example Format)

| CATEGORIES | YEAR ONE | | YEAR TWO | | YEAR THREE | | TOTAL PROJECT | |
|----------------------------------------------------------------------------------------------------------------------|----------|------------|----------|------------|------------|------------|---------------|------------|
| | Federal | Cost-Share | Federal | Cost-Share | Federal | Cost-Share | Federal | Cost-Share |
| a. Personnel Principal Investigator Co-PI Research Scientists Postdoctoral Scientists Other Personnel | | | | | | | | |
| TOTAL PERSONNEL COSTS | | | | | | | | |
| b. Fringe Benefits _____ % of _____ | | | | | | | | |
| c. Travel Trip 1 Trip 1 Trip 1 ...etc. | | | | | | | | |
| TOTAL TR AVEL COSTS | | | | | | | | |
| d. Equipment Item 1 Item 2 Item 3 ...etc. | | | | | | | | |
| TOTAL EQUIPMENT COSTS | | | | | | | | |
| e. Supplies Item 1 Item 2 Item 3 ...etc. | | | | | | | | |
| TOTAL SUPPLY COSTS | | | | | | | | |
| f. Contracts 1 2 3 ...etc. | | | | | | | | |
| TOTAL CONTRACTUAL COSTS | | | | | | | | |
| g. Other Item 1 Item 2 Item 3 ...etc. | | | | | | | | |
| TOTAL OTHER COSTS | | | | | | | | |
| h. TOTAL DIRECT COSTS (sum of a-g) | | | | | | | | |
| i. Indirect Costs/Charges _____ % of _____ (base) | | | | | | | | |
| j. TOTAL PROJECT COSTS (sum of h & i) | | | | | | | | |
| k. TOTAL REQUESTED FROM EPA | | | | | | | | |